

STATEMENT OF BASIS

as required by LAC 33:IX.3109, for draft Louisiana Pollutant Discharge Elimination System Permit No. LA0040991; AI 39698; PER20050001 to discharge to waters of the State of Louisiana as per LAC 33:IX.2311.

The permitting authority for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

I. THE APPLICANT IS: Town of Urania
Urania Wastewater Treatment Facility
P.O. Box 339
Urania, LA 71480

II. PREPARED BY: Jim Bondy

DATE PREPARED: February 21, 2006

III. PERMIT ACTION: reissue LPDES permit LA0040991, AI 39698; PER20050001

LPDES application received: February 15, 2005

LPDES permit issued: March 1, 2000

LPDES permit expired: February 28, 2005

EPA has not retained enforcement authority.

IV. FACILITY INFORMATION:

- A. The application is for the discharge of treated sanitary wastewater from a publicly owned treatment works serving the Town of Urania and the Town of Tullos.
- B. The permit application does not indicate the receipt of industrial wastewater.
- C. The facility is located on Highway 125 in Urania, La Salle Parish.
- D. The treatment facility consists of a mechanical sewer treatment plant with aeration. Disinfection is by chlorination.
- E. Outfall 001

Discharge Location: Latitude 31° 51' 2" North
Longitude 92° 18' 14" West

Description: treated sanitary wastewater

Design Capacity: 0.28 MGD

Type of Flow Measurement which the facility is currently using:

V-Notch Weir

V. RECEIVING WATERS:

The discharge is into local drainage; thence into Chickasaw Creek ; thence into Castor Creek; thence into Little River in segment 081501 of the Ouachita River Basin.

The designated uses and degree of support for Segment 081501 of the Ouachita River Basin are as indicated in the table below¹:

Overall Degree of Support for Segment	Degree of Support of Each Use							
	Partial	Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
		Full	Full	Not Supported	N/A	N/A	N/A	N/A

^{1/}The designated uses and degree of support for Segment 081501 of the Ouachita River Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2004 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

VI. ENDANGERED SPECIES:

The receiving waterbody, Subsegment 081501 of the Ouachita River Basin, is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U. S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated October 21, 2005 from Watson (FWS) to Gautreaux (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

VII. HISTORIC SITES:

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the 'Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits' no consultation with the Louisiana State Historic Preservation Officer is required.

VIII. PUBLIC NOTICE:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

For additional information, contact:

Jim Bondy
Permits Division
Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

IX.

PROPOSED PERMIT LIMITS:

Subsegment 081501, Castor Creek – Headwaters to Little River, is not listed on LDEQ's Final 2004 303(d) list as impaired. However, subsegment 081501 was previously listed as impaired for Organic enrichment/low DO, chlorides, and TDS, for which the below TMDL's have been developed. The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional TMDL's and/or water quality studies. The DEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDL's for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as necessary to achieve compliance with water quality standards.

The *Castor Creek Watershed TMDL for Biological Oxygen-Demand Substances* names seven (7) dischargers, but states that none are directly to Castor Creek and are either not significant or are a great distance from Castor Creek. Therefore, limits for BOD₅ will remain as previously permitted.

The *Castor Creek Watershed TMDL For Chlorides and Salinity/TDS* states that since point sources do not represent a significant source of chloride or TDS, these TMDLs only address the non-point source contribution of chloride and TDS. Therefore, no requirements for chlorides or TDS will be placed in this permit.

Final Effluent Limits:**OUTFALL 001**

Final limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
BOD ₅	70	30 mg/l	45 mg/l	Limits are set in accordance with the <i>Castor Creek Watershed TMDL for Biological Oxygen-Demand Substances</i> , the Statewide Sanitary Effluent Limits Policy (SSELP), the original Ouachita River Basin Plan for facilities of this treatment type and size, and the previous permit.
TSS	70	30 mg/l	45 mg/l	Limits are set in accordance with the Statewide Sanitary Effluent Limits Policy (SSELP), the original Ouachita River Basin Plan for facilities of this treatment type and size, and the previous permit.

Other Effluent Limitations:**1) Fecal Coliform**

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5.b.i, the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgment in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

2) pH

According to LAC 33:IX.3705.A.1., POTW's must treat to at least secondary levels. Therefore, in accordance with LAC 33:IX.5905.C., the pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time.

3) Solids and Foam

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

X. PREVIOUS PERMITS:**LPDES Permit No. LA0040991:** Issued: March 1, 2000

Expired: February 28, 2005

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	<u>Daily Avg.</u>	<u>Daily Max.</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow	Report	Report	Continuous	Recorder
BOD ₅	30 mg/l	45 mg/l	2/month	Grab
TSS	30 mg/l	45 mg/l	2/month	Grab
Fecal Coliform				
Colonies/100 ml	200	400	2/month	Grab
pH	Range (6.0 su – 9.0 su)		2/month	Grab

The permit contains pollution prevention language.

XI. ENFORCEMENT AND SURVEILLANCE ACTIONS:**A) Inspections**

A review of the files indicates the following most recent inspection was performed by LDEQ personnel on October 17, 2005.

Findings and/or Violations -

1. The treatment plant is old and in poor operating condition.
2. The facility is not using a continuous recorder for monitoring flow, as required by the permit.
3. DMR review shows that there are permit limitation violations every month.
4. The facility was referred to enforcement.

B) Compliance and/or Administrative Orders

A review of the files indicates the following most recent enforcement actions administered against this facility:

The facility was issued Warning Letter (WE-L-03-0775) on December 1, 2003.

C) DMR Review

A review of the discharge monitoring reports for the period beginning January 1, 2004 through June 30, 2005 has revealed the following violations:

Month	Parameter	DMR Reported Value	Permit Limit
January 2004	BOD ₅ , Monthly Avg.	64.71 mg/l	30 mg/l
	BOD ₅ , Weekly Avg.	104 mg/l	45 mg/l
	BOD ₅ (mass), Monthly Avg.	78.26 lb/day	70 lb/day
	TSS, Monthly Avg.	256.5 mg/l	30 mg/l
	TSS, Weekly Avg.	606 mg/l	45 mg/l
	TSS (mass), Monthly Avg.	305.95 lb/day	70 lb/day
March 2004	BOD ₅ , Monthly Avg.	99.98 mg/l	30 mg/l
	BOD ₅ , Weekly Avg.	120 mg/l	45 mg/l
	BOD ₅ (mass), Monthly Avg.	141.62 lb/day	70 lb/day
	TSS, Monthly Avg.	61.74 mg/l	30 mg/l
	TSS, Weekly Avg.	86.4 mg/l	45 mg/l
	TSS (mass), Monthly Avg.	89.85 lb/day	70 lb/day
April 2004	Fecal Coliform, Monthly Avg.	12,174 colonies/ml	200 colonies/ml
	Fecal Coliform, Weekly Avg.	57,000 colonies/ml	400 colonies/ml
	BOD ₅ , Monthly Avg.	89.55 mg/l	30 mg/l
	BOD ₅ , Weekly Avg.	122 mg/l	45 mg/l
	BOD ₅ (mass), Monthly Avg.	82.15 lb/day	70 lb/day
	TSS, Monthly Avg.	33.85 mg/l	30 mg/l
May 2004	BOD ₅ , Monthly Avg.	75.7 mg/l	30 mg/l
	BOD ₅ , Weekly Avg.	90 mg/l	45 mg/l
	TSS, Monthly Avg.	82 mg/l	30 mg/l
	TSS, Weekly Avg.	96 mg/l	45 mg/l
	TSS (mass), Monthly Avg.	77.21 lb/day	70 lb/day
	Fecal Coliform, Monthly Avg.	7070 colonies/ml	200 colonies/ml
June 2004	Fecal Coliform, Weekly Avg.	51,000 colonies/ml	400 colonies/ml
	BOD ₅ , Monthly Avg.	44 mg/l	30 mg/l
	TSS, Monthly Avg.	67.6 mg/l	30 mg/l
	TSS, Weekly Avg.	87.2 mg/l	45 mg/l
	TSS (mass), Monthly Avg.	92.59 lb/day	70 lb/day
	Fecal Coliform, Monthly Avg.	3734 colonies/ml	200 colonies/ml
July 2004	Fecal Coliform, Weekly Avg.	8200 colonies/ml	400 colonies/ml
	BOD ₅ , Monthly Avg.	104.81 mg/l	30 mg/l
	BOD ₅ , Weekly Avg.	170 mg/l	45 mg/l
	BOD ₅ (mass), Monthly Avg.	118.01 lb/day	70 lb/day
	TSS, Monthly Avg.	59.91 mg/l	30 mg/l
	TSS, Weekly Avg.	97.6 mg/l	45 mg/l
August 2004	BOD ₅ , Monthly Avg.	80.30 mg/l	30 mg/l
	BOD ₅ , Weekly Avg.	120 mg/l	45 mg/l
	BOD ₅ (mass), Monthly Avg.	90.41 lb/day	70 lb/day
	TSS, Monthly Avg.	177.78 mg/l	30 mg/l
	TSS, Weekly Avg.	256 mg/l	45 mg/l
	TSS (mass), Monthly Avg.	205.44 lb/day	70 lb/day
September 2004	Fecal Coliform, Monthly Avg.	4948 colonies/ml	200 colonies/ml
	Fecal Coliform, Weekly Avg.	51,000 colonies/ml	400 colonies/ml
	BOD ₅ , Monthly Avg.	161.67 mg/l	30 mg/l
	BOD ₅ , Weekly Avg.	180 mg/l	45 mg/l
	BOD ₅ (mass), Monthly Avg.	182.02 lb/day	70 lb/day

Statement of Basis

LA0040991; AI 39698; PERPER20050001

Page 7

	TSS, Monthly Avg.	85.63 mg/l	30 mg/l
	TSS, Weekly Avg.	92.8 mg/l	45 mg/l
	TSS (mass), Monthly Avg.	98.86 lb/day	70 lb/day
	Fecal Coliform, Monthly Avg.	4950 colonies/ml	200 colonies/ml
	Fecal Coliform, Weekly Avg.	5000 colonies/ml	400 colonies/ml
October 2004	BOD ₅ , Monthly Avg.	131.5 mg/l	30 mg/l
	BOD ₅ , Weekly Avg.	175 mg/l	45 mg/l
	BOD ₅ (mass), Monthly Avg.	120.64 lb/day	70 lb/day
	TSS, Monthly Avg.	96.8 mg/l	30 mg/l
	TSS, Weekly Avg.	128.8 mg/l	45 mg/l
	TSS (mass), Monthly Avg.	91.15 lb/day	70 lb/day
	Fecal Coliform, Monthly Avg.	7211 colonies/ml	200 colonies/ml
	Fecal Coliform, Weekly Avg.	52,000 colonies/ml	400 colonies/ml
November 2004	BOD ₅ , Monthly Avg.	68.5 mg/l	30 mg/l
	BOD ₅ , Weekly Avg.	92 mg/l	45 mg/l
	BOD ₅ (mass), Monthly Avg.	72.23 lb/day	70 lb/day
	TSS, Monthly Avg.	57 mg/l	30 mg/l
	TSS, Weekly Avg.	75.6 mg/l	45 mg/l
	Fecal Coliform, Monthly Avg.	71,358 colonies/ml	200 colonies/ml
	Fecal Coliform, Weekly Avg.	76,000 colonies/ml	400 colonies/ml
December 2004	BOD ₅ , Monthly Avg.	42 mg/l	30 mg/l
	BOD ₅ , Weekly Avg.	92 mg/l	45 mg/l
	TSS, Monthly Avg.	43.12 mg/l	30 mg/l
	TSS, Weekly Avg.	50.6 mg/l	45 mg/l
	Fecal Coliform, Monthly Avg.	7823 colonies/ml	200 colonies/ml
	Fecal Coliform, Weekly Avg.	51,000 colonies/ml	400 colonies/ml
January 2005	BOD ₅ , Monthly Avg.	66.38 mg/l	30 mg/l
	BOD ₅ , Weekly Avg.	90 mg/l	45 mg/l
	BOD ₅ (mass), Monthly Avg.	74.65 lb/day	70 lb/day
	TSS, Monthly Avg.	96.63 mg/l	30 mg/l
	TSS, Weekly Avg.	155.2 mg/l	45 mg/l
	TSS (mass), Monthly Avg.	111.42 lb/day	70 lb/day
	Fecal Coliform, Monthly Avg.	17,146 colonies/ml	200 colonies/ml
	Fecal Coliform, Weekly Avg.	28000 colonies/ml	400 colonies/ml
February 2005	BOD ₅ , Monthly Avg.	42.65 mg/l	30 mg/l
	BOD ₅ , Weekly Avg.	50 mg/l	45 mg/l
	TSS, Monthly Avg.	67 mg/l	30 mg/l
	TSS, Weekly Avg.	77 mg/l	45 mg/l
	TSS (mass), Monthly Avg.	91.77 lb/day	70 lb/day
	Fecal Coliform, Monthly Avg.	225.8 colonies/ml	200 colonies/ml
	Fecal Coliform, Weekly Avg.	5100 colonies/ml	400 colonies/ml
March 2005	BOD ₅ , Monthly Avg.	114.89 mg/l	30 mg/l
	BOD ₅ , Weekly Avg.	116 mg/l	45 mg/l
	BOD ₅ (mass), Monthly Avg.	172.47 lb/day	70 lb/day
	TSS, Monthly Avg.	83 mg/l	30 mg/l
	TSS, Weekly Avg.	87.8 mg/l	45 mg/l
	TSS (mass), Monthly Avg.	115.15 lb/day	70 lb/day
	Fecal Coliform, Monthly Avg.	7379 colonies/ml	200 colonies/ml
	Fecal Coliform, Weekly Avg.	9000 colonies/ml	400 colonies/ml
April 2005	BOD ₅ , Monthly Avg.	90 mg/l	30 mg/l
	BOD ₅ , Weekly Avg.	100 mg/l	45 mg/l
	BOD ₅ (mass), Monthly Avg.	87.16 lb/day	70 lb/day
	TSS, Monthly Avg.	62.4 mg/l	30 mg/l

	TSS, Weekly Avg.	65.2 mg/l	45 mg/l
	Fecal Coliform, Monthly Avg.	7690 colonies/ml	200 colonies/ml
	Fecal Coliform, Weekly Avg.	8100 colonies/ml	400 colonies/ml
May 2005	BOD ₅ , Monthly Avg.	126.05 mg/l	30 mg/l
	BOD ₅ , Weekly Avg.	134 mg/l	45 mg/l
	BOD ₅ (mass), Monthly Avg.	194.49 lb/day	70 lb/day
	TSS, Monthly Avg.	109.16 mg/l	30 mg/l
	TSS, Weekly Avg.	114 mg/l	45 mg/l
	TSS (mass), Monthly Avg.	172.86 lb/day	70 lb/day
	Fecal Coliform, Monthly Avg.	5050 colonies/ml	200 colonies/ml
	Fecal Coliform, Weekly Avg.	8500 colonies/ml	400 colonies/ml
June 2005	BOD ₅ , Monthly Avg.	235 mg/l	30 mg/l
	BOD ₅ , Weekly Avg.	330 mg/l	45 mg/l
	BOD ₅ (mass), Monthly Avg.	215.59 lb/day	70 lb/day
	TSS, Monthly Avg.	60.5 mg/l	30 mg/l
	TSS, Weekly Avg.	64.6 mg/l	45 mg/l
	Fecal Coliform, Monthly Avg.	648 colonies/ml	200 colonies/ml
	Fecal Coliform, Weekly Avg.	2100 colonies/ml	400 colonies/ml

XII.**ADDITIONAL INFORMATION:**

The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional water quality studies and/or TMDL's. The DEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDL's for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as requested by the permittee and/or as necessary to achieve compliance with water quality standards. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

Final effluent loadings (i.e. lbs/day) have been established based upon the permit limit concentrations and the design capacity of 0.28 MGD.

Effluent loadings are calculated using the following example:

$$\text{BOD: } 8.34 \text{ lb/gal} \times 0.28 \text{ MGD} \times 30 \text{ mg/l} = 70 \text{ lb/day}$$

At present, the **Monitoring Requirements, Sample Types, and Frequency of Sampling** as shown in the permit are standard for facilities of flows between 0.10 and 0.50 MGD.

Effluent CharacteristicsMonitoring Requirements

	<u>Measurement</u>	<u>Sample</u>
	<u>Frequency</u>	<u>Type</u>
Flow	Continuous	Recorder
BOD ₅	2/month	Grab
Total Suspended Solids	2/month	Grab
Fecal Coliform Bacteria	2/month	Grab
pH	2/month	Grab

Pretreatment Requirements

Based upon consultation with LDEQ pretreatment personnel, the permit has standard pretreatment requirements; however, the facility will not be required to develop a full pretreatment program.

XIII TENTATIVE DETERMINATION:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in this Statement of Basis.

XIV REFERENCES:

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 8, "Wasteload Allocations / Total Maximum Daily Loads and Effluent Limitations Policy," Louisiana Department of Environmental Quality, 2005.

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 5, "Water Quality Inventory Section 305(b) Report," Louisiana Department of Environmental Quality, 1998.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards," Louisiana Department of Environmental Quality, 2004.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart 2 - "The LPDES Program," Louisiana Department of Environmental Quality, 2004.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

LPDES Permit Application to Discharge Wastewater, Town of Uria, Uria Wastewater Treatment Facility, February 15, 2005.